

## ABSTRACT OF THE DISCLOSURE

A characteristic value-calculating unit, calculating a characteristic value based on an input image signal, a conversion characteristic-calculating unit, determining a conversion characteristic from the characteristic value, and a signal-converting unit, converting the input image signals in accordance with the determined conversion characteristic, are provided. The conversion characteristic has a low level region segment, which is close to the origin, a high level region segment, which is close to a full scale point, and a middle level region segment, which is positioned between the low level region and high level region, and the slope in the middle level region is set so as to be larger than both of the slopes of the low level region and the high level region.